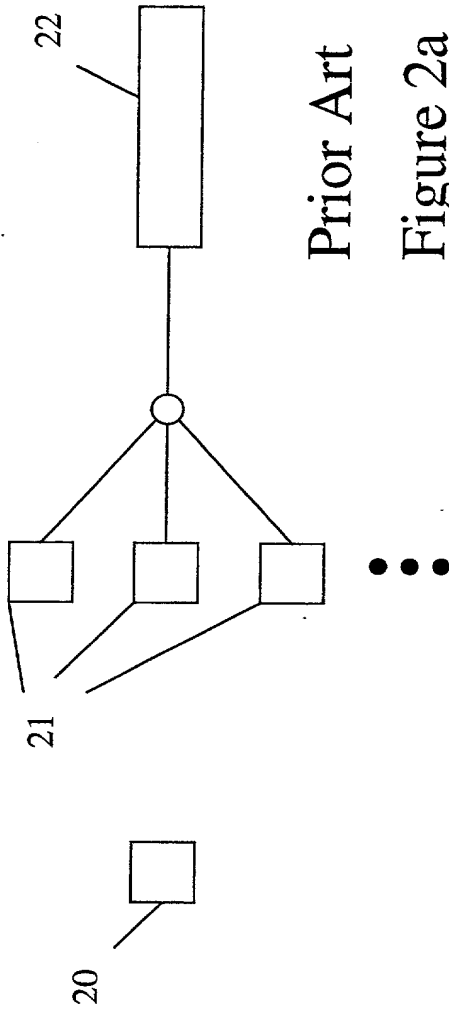


PRIOR ART

FIGURE 1



Prior Art

Figure 2a

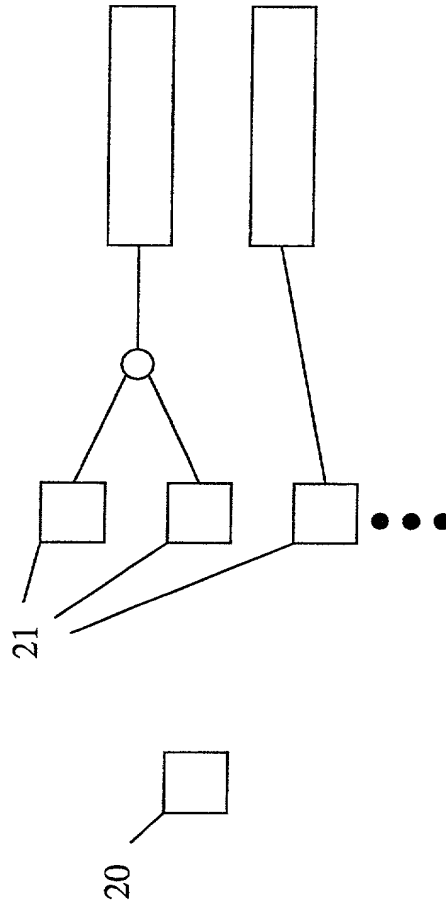
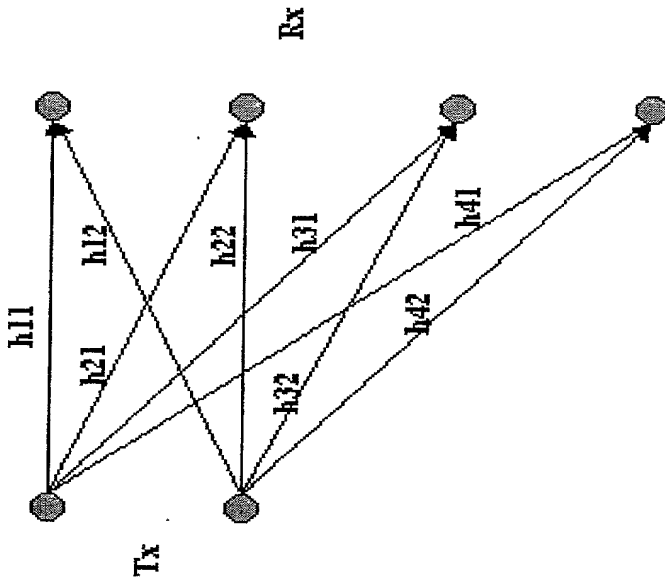
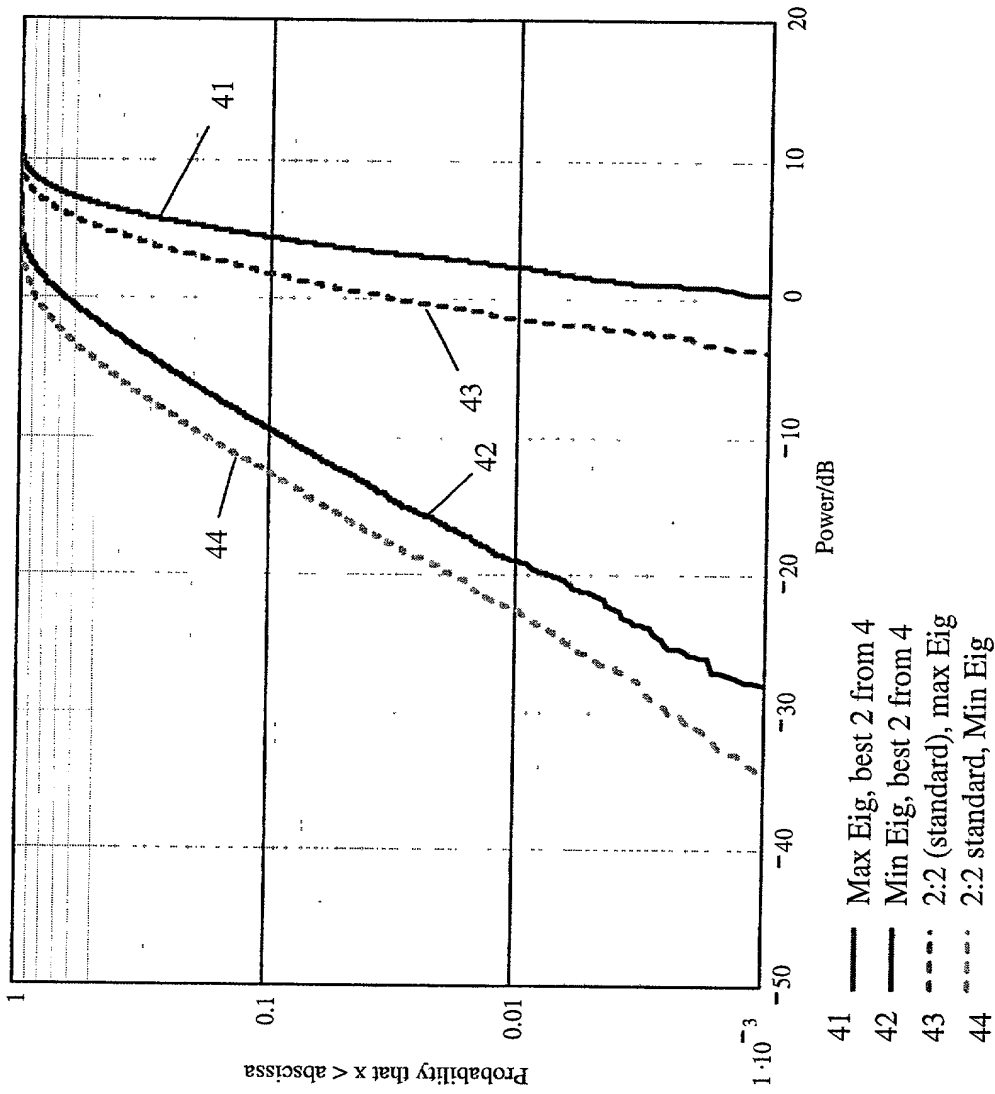


Figure 2b



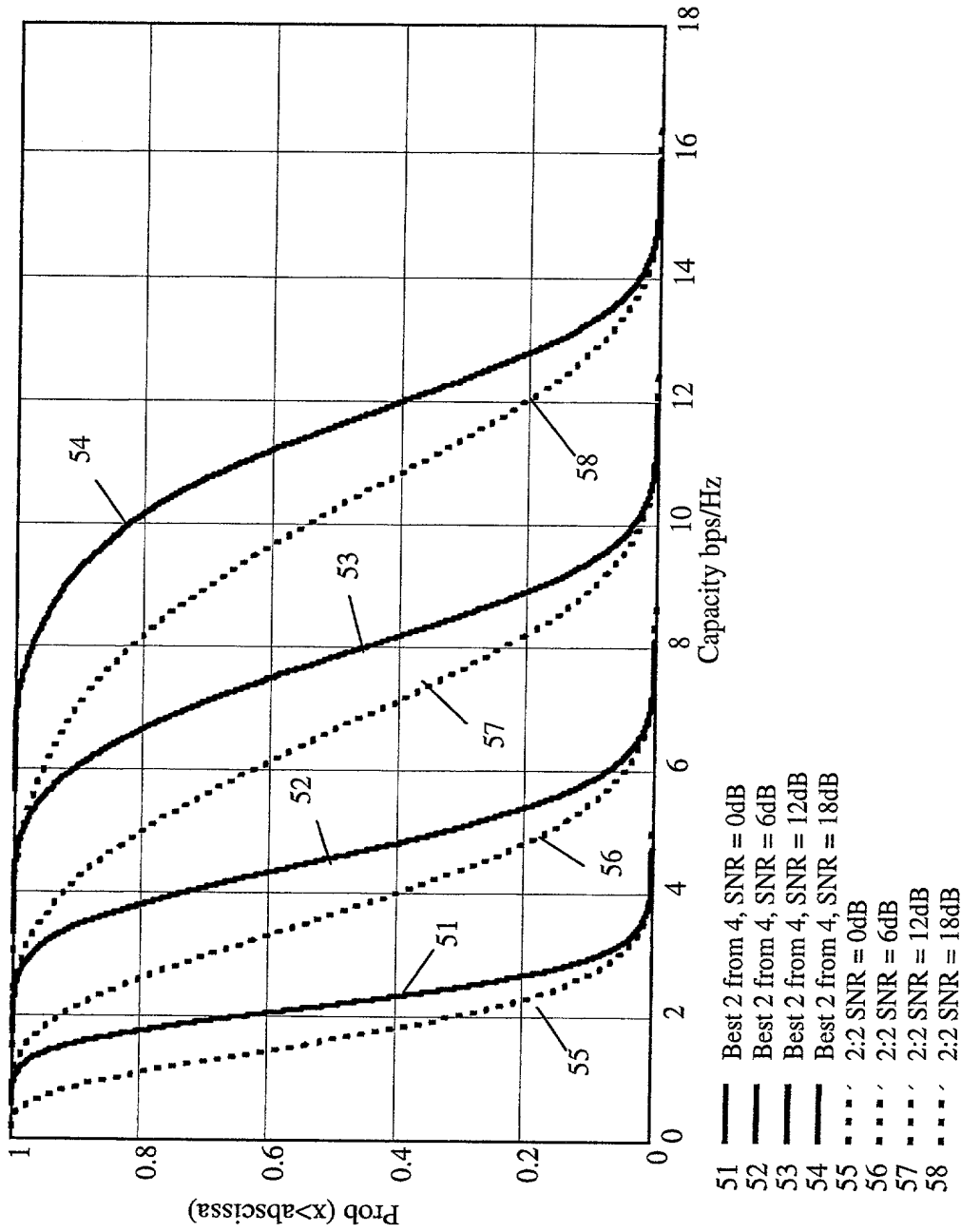
MIMO configuration with 2 Node B antennas and 4 UE antennas

Figure 3



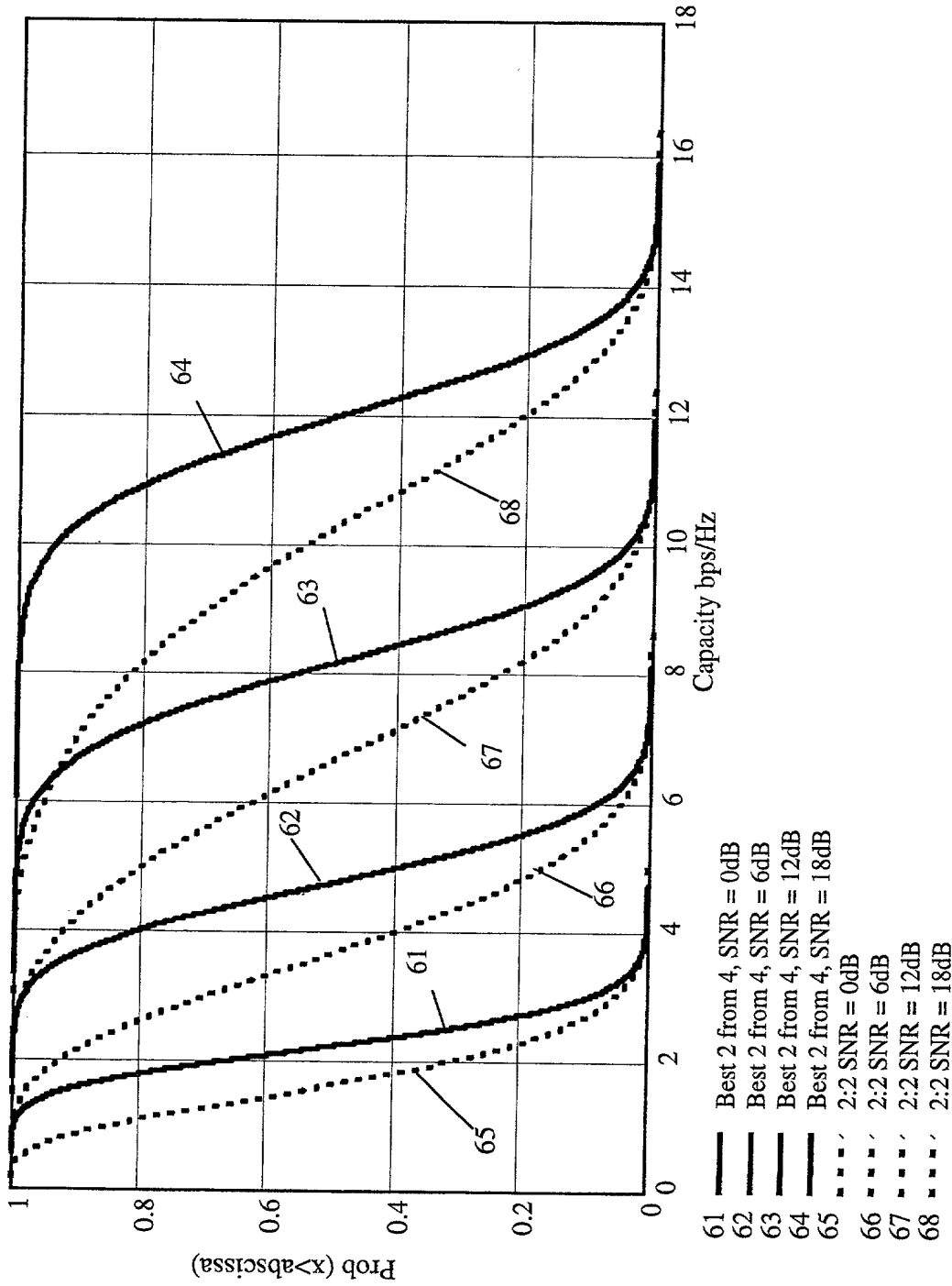
Comparison of eigenvalues for standard 2:2 MIMO and eigenvalue selection diversity (best 2 from 4) using the maximum sum of eigenvalues as the selection metric.

Figure 4



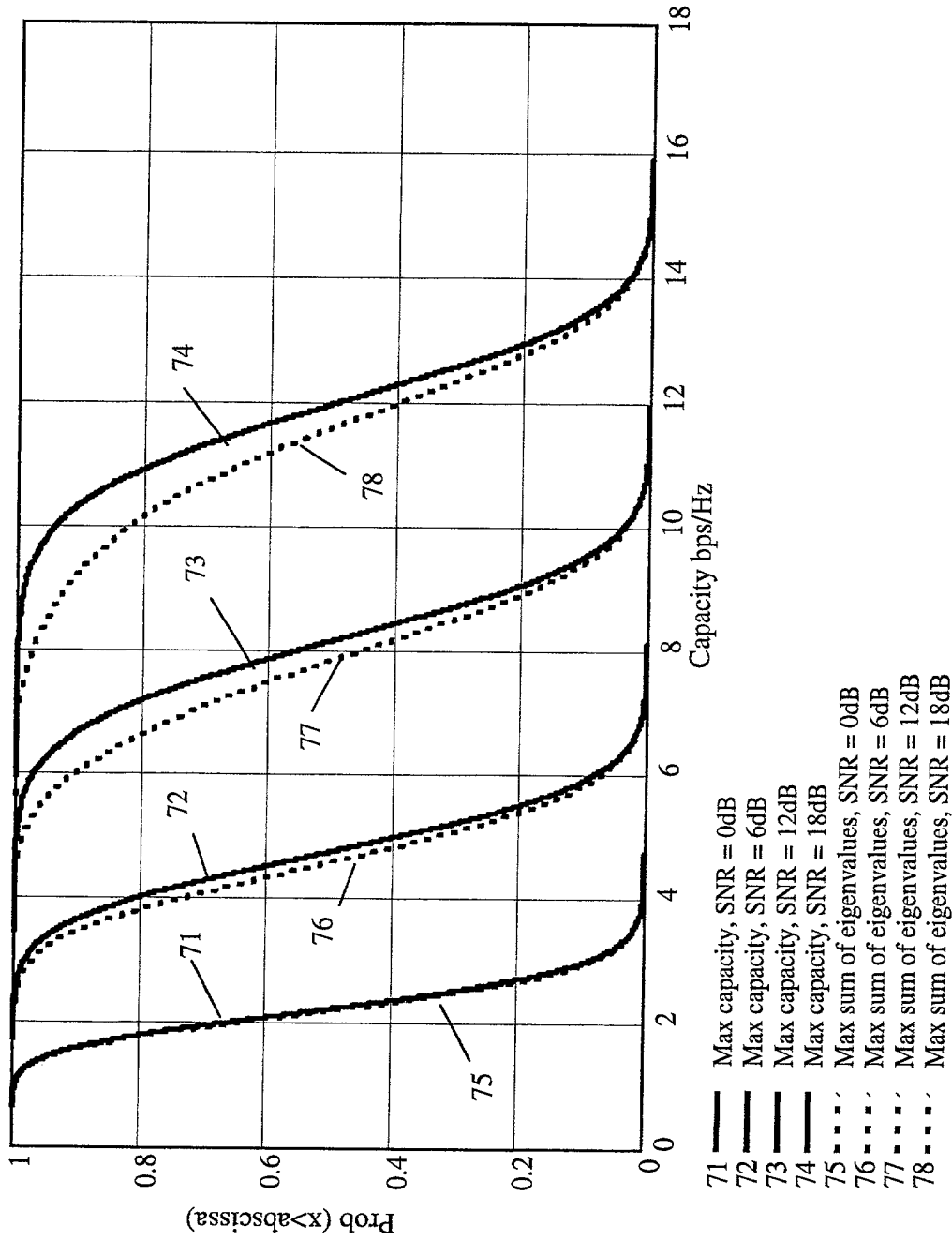
Comparison of capacity distributions for standard 2:2 MIMO and eigenvalue selection diversity (best 2 from 4) using the maximum sum of eigenvalues as the selection metric.

Figure 5



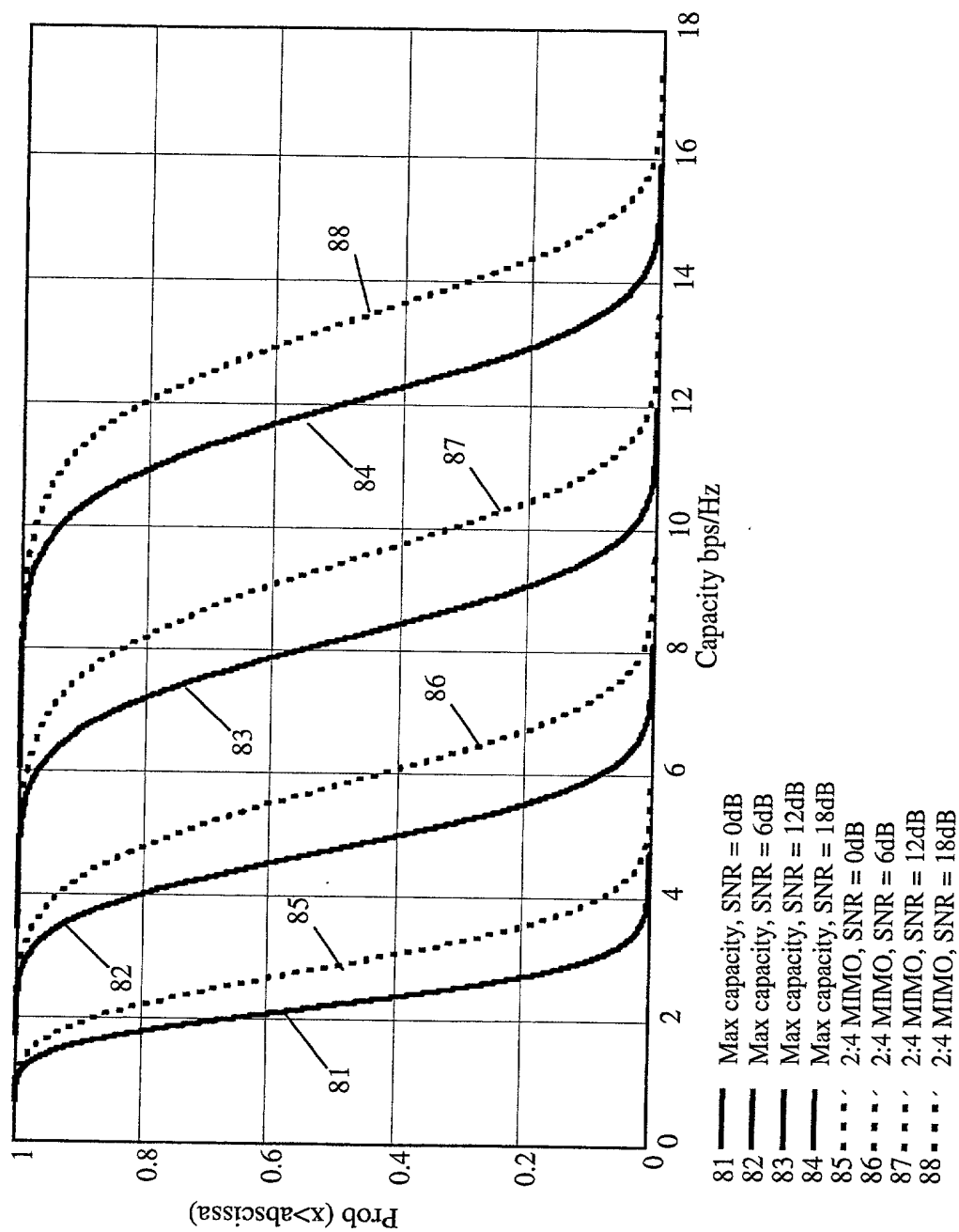
Comparison of capacity distributions for standard 2:2 MIMO and eigenvalue selection diversity (best 2 from 4) using the maximum instantaneous link capacity as the selection metric.

Figure 6



Comparison of capacity distributions for the two eigenvalue selection diversity schemes

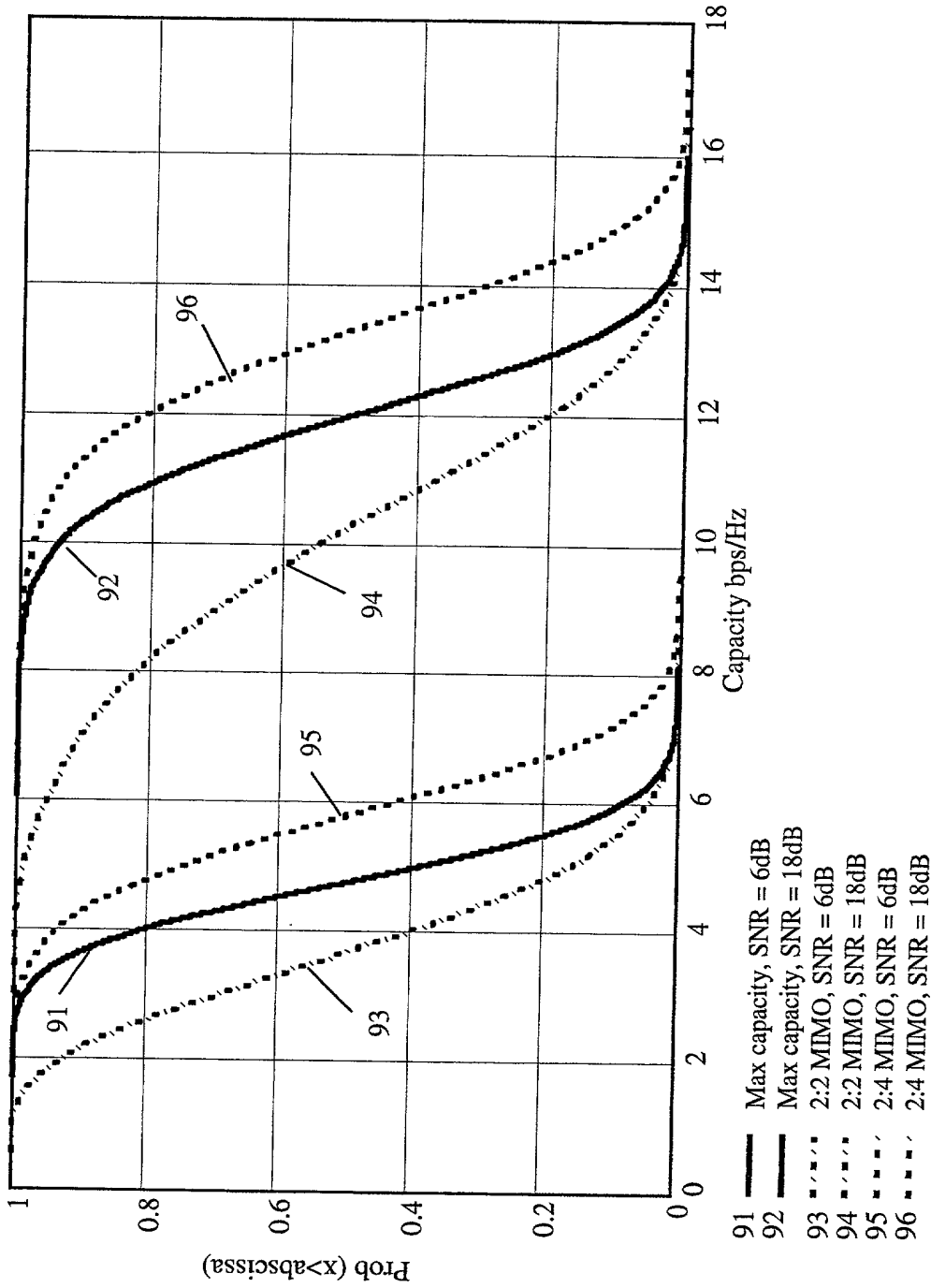
Figure 7



Comparison of 'maximum capacity' eigenvalue selection diversity and standard 2:4 MIMO capacity distributions.

Figure 8





Comparison of maximum capacity eigenvalue selection diversity with 2:2 and 2:4 MIMO capacity curves

Figure 9

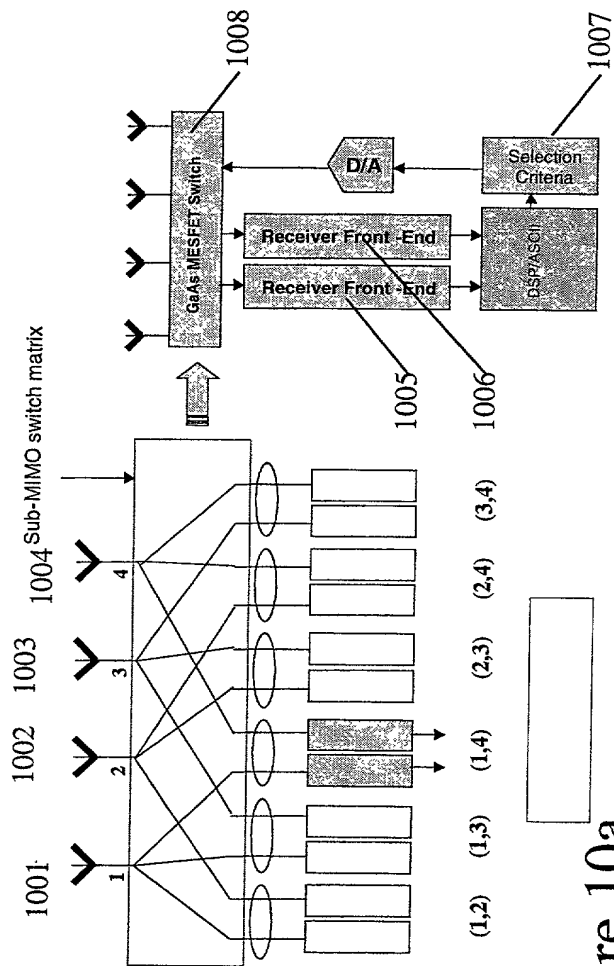


Figure 10a

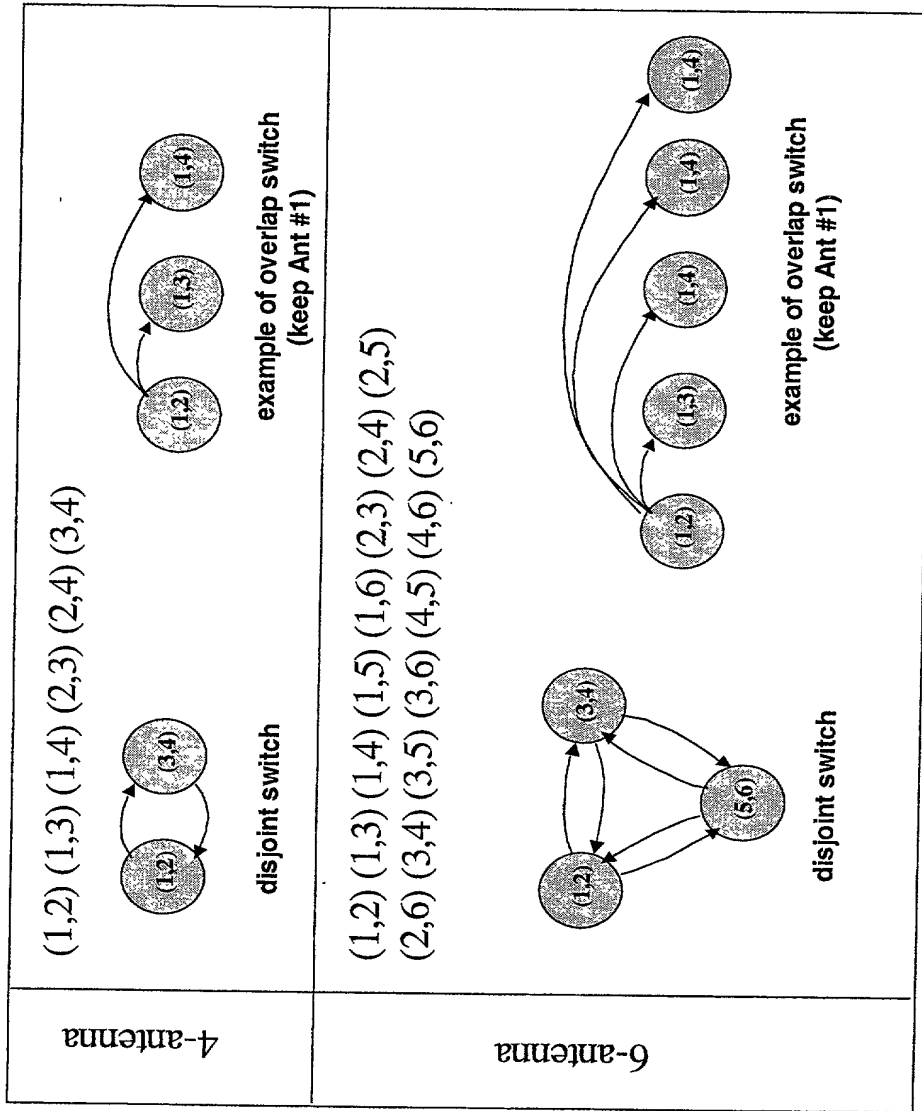


Figure 10b

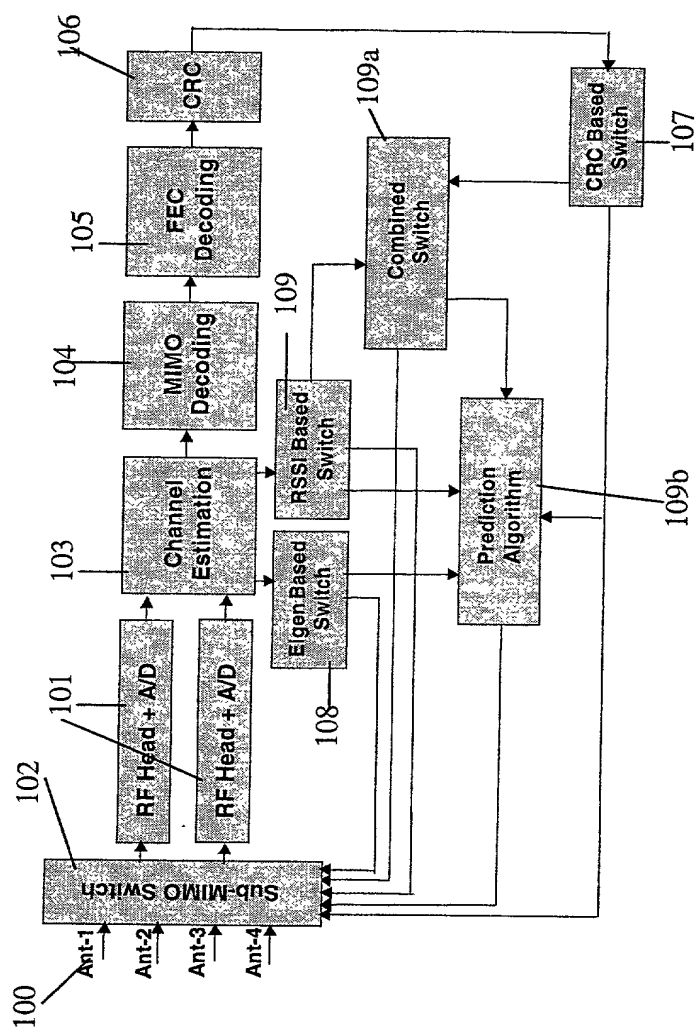


Figure 10c

# Sub-MIMO Switching Comparison (STTD,ITU-VA, 100km/h, QPSK, R=1/3)

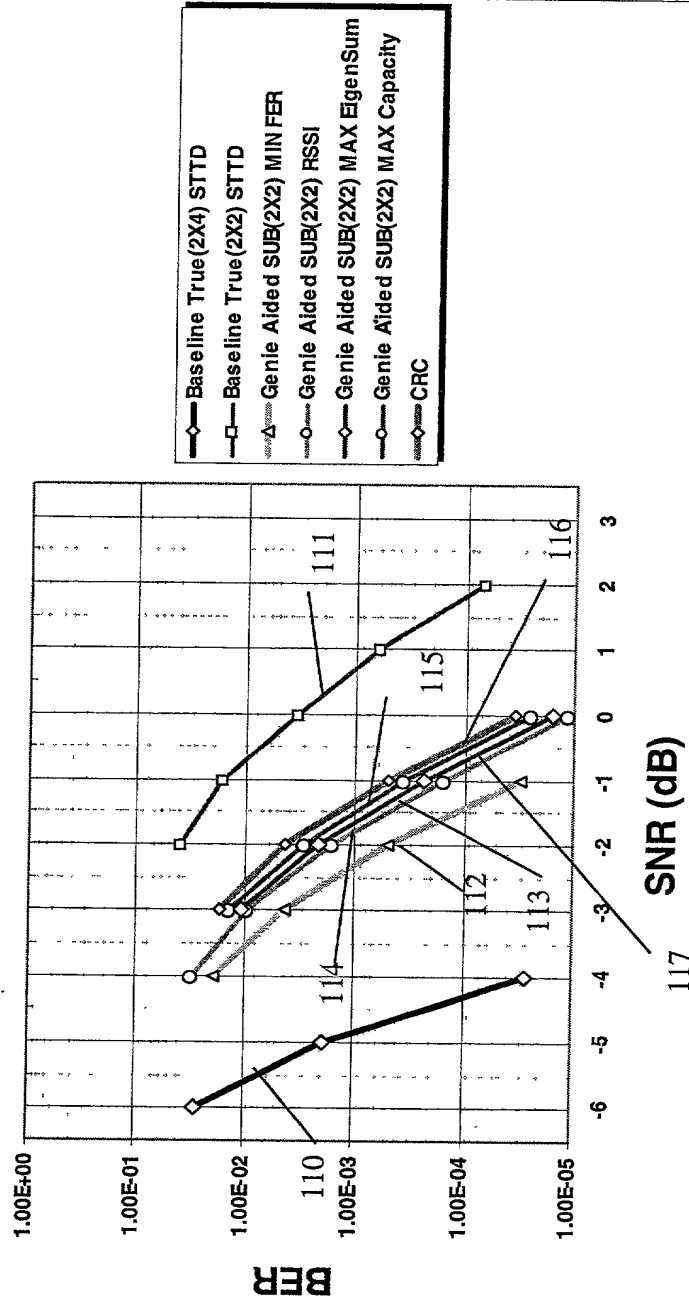


Figure 11

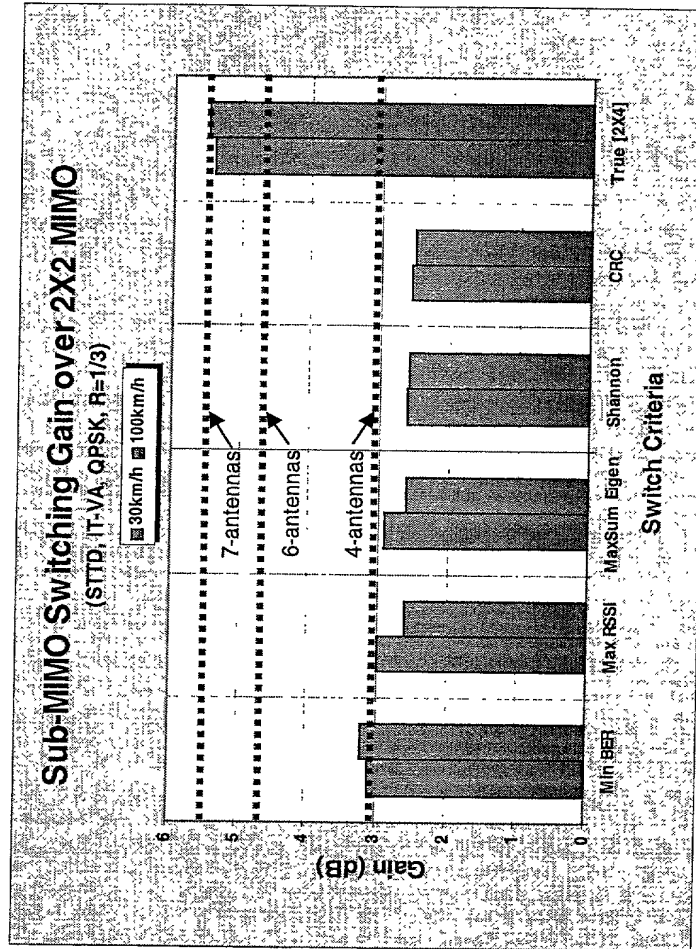


Figure 12

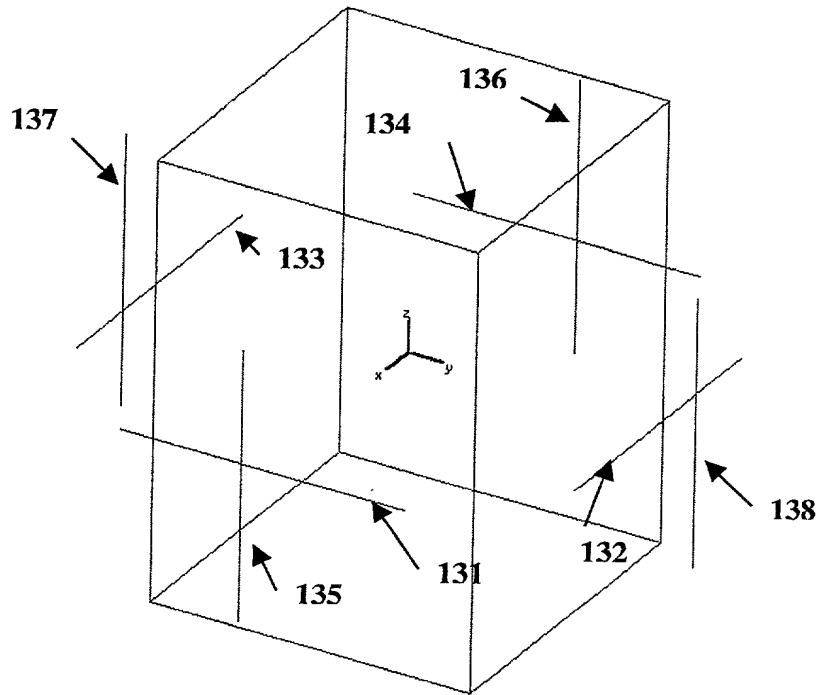


Figure 13

16/20

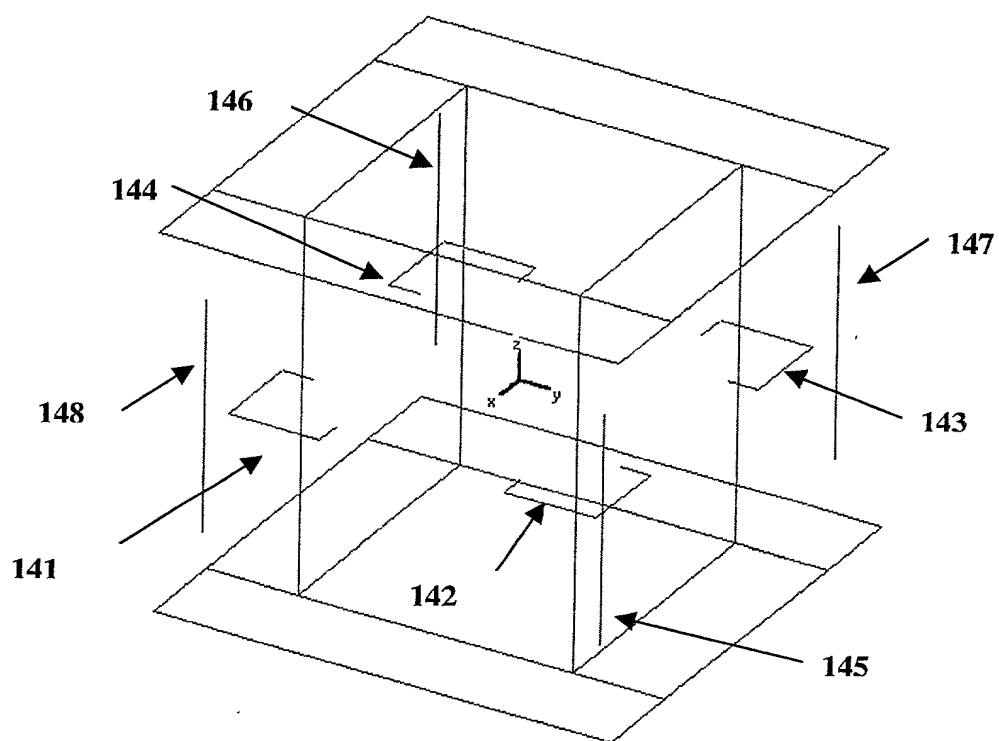


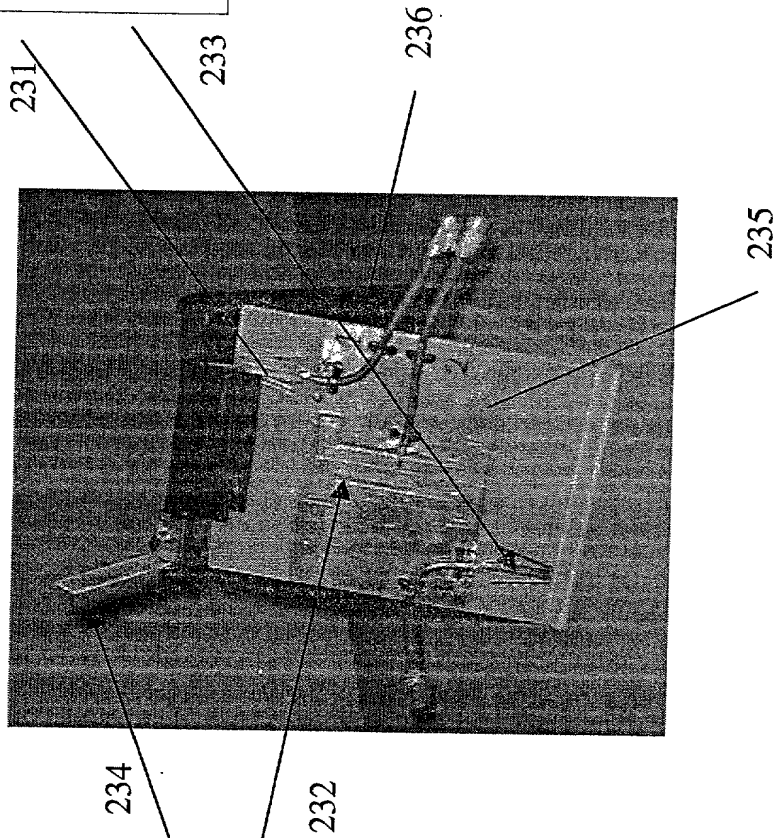
Figure 14



	Configuration 1		Configuration 2		
Average signal level (dB)	180°	4.6	180°	3.9	
	90°	6.7	90°	4.8	
Signal level spread (dB)	180°	1.4	180°	1.5	
	90°	0.5	90°	0.3	
Average standard deviation (dB)	180°	4.1	180°	1.7	
	90°	1.4	90°	0.4	
Lowest maximum achievable diversity gain (dB) (unit 0° orientation)	11.5		15		
Lowest maximum achievable diversity gain (dB) (unit 45° orientation)	14.5		14		

Figure 15

Elements 231 &  
233 – umbrella  
monopoles  
polarised at  
nominally +45°.



Element 232 –  
folded slot & 234 –  
monopole, which are  
nominally polarised  
to -45°.

FIGURE 16

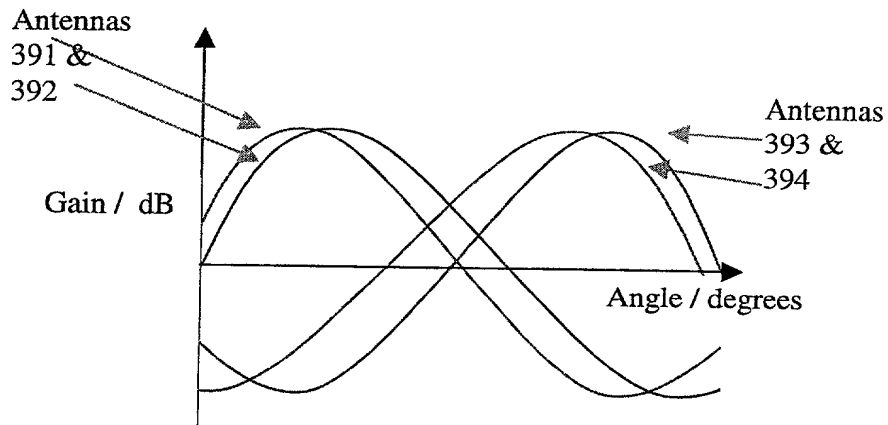


Figure 17

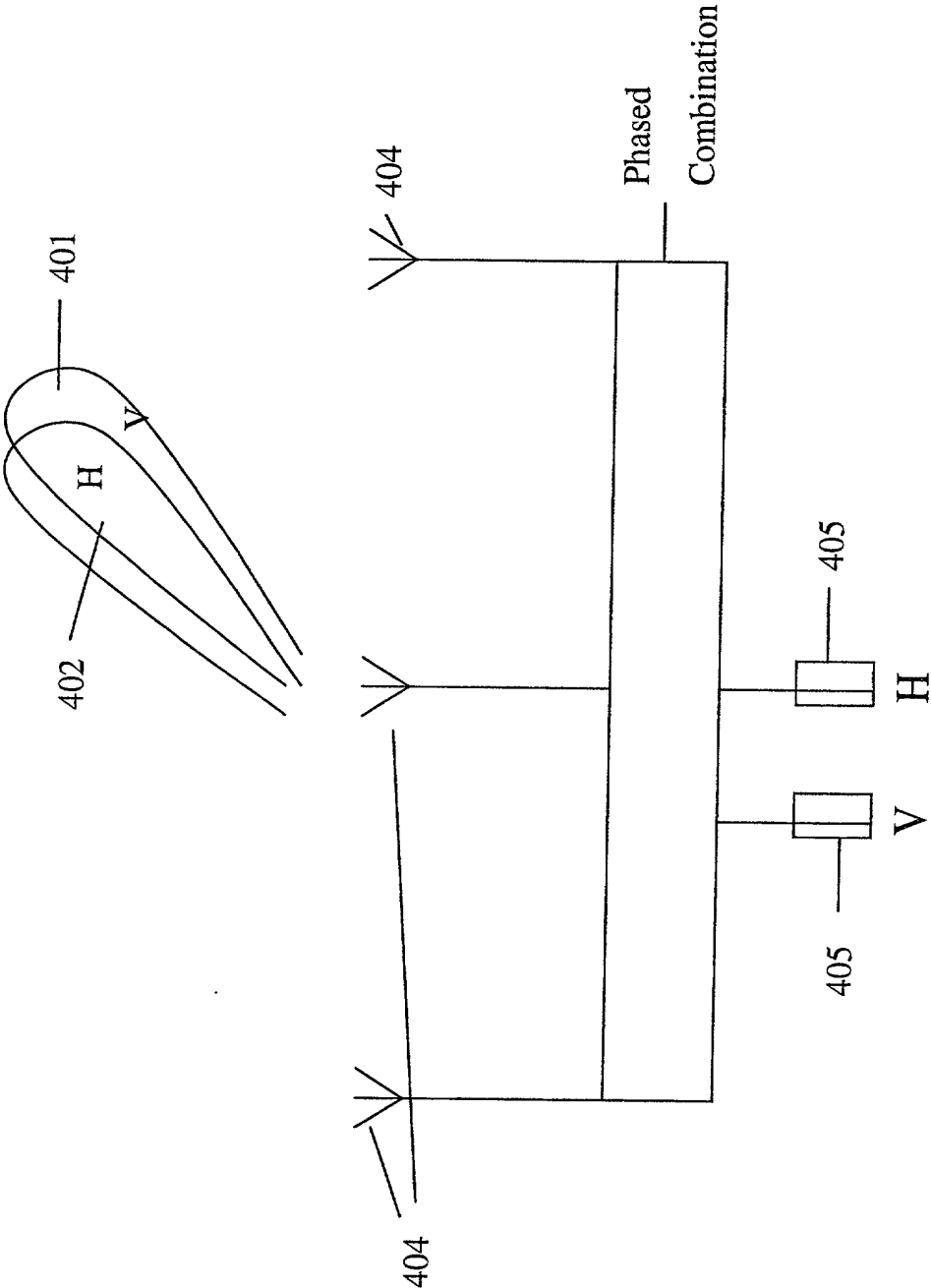


FIGURE 18